

AMENDMENTS TO THE CLAIMS

Please amend Claims 1 and 11 and add Claims 19 through 21 to read as follows:

1. (Currently Amended) An imaging optical system comprising,
a layered diffraction optical member laminated with a plurality of diffraction
parts, wherein said layered diffraction optical member is provided in front of a pupil,
wherein said layered diffraction optical member includes a first diffraction part of
negative power and a second diffraction part of positive power provided behind said first
diffraction part,
wherein said first diffraction part and said second diffraction part are made of
materials having dispersion characteristics different from each other,
wherein said layered diffraction optical member is formed to have high diffraction
efficiency for diffracted light of a particular order over a visible wavelength range to be used in
said optical system, and
wherein said first diffraction part reduces the incident angle of a ~~light~~ principal ray
which is incident on said second diffraction part.

2-3. (Cancelled)

4. (Previously Presented) An optical system according to Claim 1, wherein an air
layer is interposed between said first diffraction part and said second diffraction part.

5-6. (Cancelled)

7. (Previously Presented) An optical system according to Claim 1, further comprising a refraction optical member.

8-10. (Cancelled)

11. (Currently Amended) An optical system comprising:
a layered diffraction optical member laminated with a plurality of diffraction parts, wherein said layered diffraction optical member is provided behind a pupil,
wherein said layered diffraction optical member includes a first diffraction part of positive power and a second diffraction part of negative power provided behind said first diffraction part,
wherein said first diffraction part and said second diffraction part are made of materials having dispersion characteristics different from each other,
wherein said layered diffraction optical member is formed to have high diffraction efficiency for diffracted light of a particular order over a visible wavelength range to be used in said optical system, and
wherein said first diffraction part reduces the incident angle of a ~~light~~ principal ray which is incident on said second diffraction part.

12. (Cancelled)

13. (Previously Presented) An optical system according to Claim 11, wherein an air layer is interposed between said first diffraction part and said second diffraction part.

14. (Cancelled)

15. (Previously Presented) An optical system according to Claim 11, further comprising a refraction optical member.

16. (Cancelled)

17. (Previously Presented) An optical system according to Claim 1, wherein each of said first diffraction optical part and said second diffraction optical part comprises a diffraction grating, and wherein the diffraction gratings have blazed shapes oriented in opposing directions.

18. (Previously Presented) An optical system according to Claim 11, wherein each of said first diffraction optical part and said second diffraction optical part comprises a diffraction grating, and wherein the diffraction gratings have blazed shapes oriented in opposing directions.

19. (New) An optical system according to Claim 1, wherein no lens of said optical system is present on the object side of said layered diffraction optical member.

20. (New) An optical system according to Claim 7, wherein said refraction optical member is disposed on the image side of the pupil.

21. (New) An optical system according to Claim 11, wherein said optical system is an imaging optical system.